

ATTORNEY DOCKET NO.: 07083.0008U5
PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re ap	plication of)	MECEIVED
Hutchins et al.)	JUL 1 1 2002
Serial No.: 10/038,694)	TECH CENTER 1600/290 Group Art Unit: 1623
Confirm	nation No.: 1998)	
Filed: I	December 31, 2001)	Examiner: Unassigned
	SUPERFICIAL ZONE PROTEIN AND METHODS OF MAKING AND USING SAME)	

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents Washington, D.C. 20231

NEEDLE & ROSENBERG, P.C. The Candler Building 127 Peachtree Street, N.E. Atlanta, Georgia 30303-1811

July 2, 2002

Sir:

Pursuant to the requirements of 37 C.F.R. § 1.56, submitted herewith on the accompanying form PTO 1449 is a listing of documents known to the applicants and/or their attorneys. Copies of these documents are enclosed.

Applicants herein further provide a reference to co-pending application(s) pursuant to the requirements of 37 C.F.R. § 1.56 and 37 C.F.R. § 1.98(a)(1):

	Application No.	Date Filed	Inventors	Attorney Docket No.
j	09/780,718	02/09/01	Hutchins et al.	07083.0008U4

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A copy of the above co-pending application is enclosed pursuant to the requirements of 37 C.F.R. § 1.98(a)(2)(iii).

Consideration of the cited documents and making the same of record in the prosecution of the above-noted application are respectfully requested.

No fee is believed due; however, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 14-0629.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

Tina Williams McKeon Registration No. 43,791

The Candler Building 127 Peachtree Street, N.E. Atlanta, Georgia 30303-1811 404/688-0770

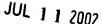
CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on the date shown below.

Tina Williams McKeon

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Form PTO-112 TRADEMERCE (Rev. 7-80)
U.S. DEPARTMENT OF COMMERCE (Rev. 7-80)
TRADEMARK OFFICE

ATTORNEY DOCKET NO.: 07083.00080

SERIAL NO. 10/038,694 CONFIRMATION NO. 1998

PATENT AND	TRADEMA	RK OFFICE					
LIST OF PRIOR ART CITED BY APPLICANT			APPLICANT: Hutchins et al.				
(Use several sheets if necessary)			al y)	FILING DATE: December 31, 2001		GROUP: 1623	
				U.S. PATENT DOCUMENTS			
EXAMINER INITIAL		DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
				FOREIGN PATENT DOCUMENTS			
,	A1	WO 00/64930 /	11/02/00	Jay (PCT)			
	A2	WO 98/08949	03/05/98	Larsen et al. (PCT)			
		OTHER	R PRIOR ART (Including Author, Title, Date, Per	tinent Pages, Etc.)		
	A3	Aigner et al. Su cartilage. <i>Arthr</i>		cartilage matrix gene expression 0:562-569 (1997)	in upper zone chondro	cytes of oste	eoarthritic
	A4	Aydelotte et al. Differences between sub-populations of cultured bovine articular chondrocytes. I. Morphology and cartilage matrix production. <i>Connect Tissue Res.</i> 18:205-222 (1988)					
	A5	Aydelotte et al. Differences between sub-populations of cultured bovine articular chondrocytes. II. Proteoglycan metabolism. Connect Tissue Res. 18:223-234 (1988)					
	A6 /	Condreay et al. Transient and stable gene expression in mammalian cells transduced with a recombinant baculovirus vector. <i>PNAS</i> 96:127-132 (1999)					
	A7 (de Belder. Preparation and properties of fluorescein-labelled hyaluronate. Carbohydr. Res. 44(2):251-257 (1975)					51-257 (1975)
	A8 [*]	Flannery et al. Articular cartilage superficial zone protein (SZP) is homologous to megakaryocyte stimulating factor precursor and is a multifunctional proteoglycan with potential growth-promoting, cytoprotective, and lubricating properties in cartilage metabolism. <i>Biochem. Biophys. Res. Commun.</i> 254(3):535-541 (1999)					
	A9	Freemont et al. Gene expression of matrix metalloproteinases 1.3. and 9 by chondrocytes in osteoarthritic human knee articular cartilage is zone and grade specific. <i>Ann Rheum Dis</i> 56:542-549 (1997)					
	A10	Guilak et al. Mechanical and biochemical changes in the superficial zone of articular cartilage in canine experimental osteoarthritis. <i>J Orthop Res</i> 12:474-484 (1994)					
	A11	Hauselmann et al. The superficial layer of human articular cartilage is more susceptible to interleukin-l-induced damage than the deeper layers. <i>Arthritis Rheum</i> 39:478-488 (1996)					
	A12	Hollander et al. Damage to type II collagen in aging and osteoarthritis starts at the articular surface. originates around chondrocytes. and extends into the cartilage with progressive degeneration. <i>J Clin Invest</i> 96:2859-2869 (1995)					
	A13	Jay et al. Lubricin is a product of megakaryocyte stimulating factor gene expression by human synovial fibroblasts. J Rheumatol 27:594-600 (2000)					
	A14	Kilpatrick et al. Rapid development of affinity matured monoclonal antibodies using RIMMS. <i>Hybridoma</i> 16:381-389 (1997)					
	A15			livered DNA-based immunizations med tor. <i>Hybridoma</i> 17:569-576 (1998)	iate rapid production	of murine mor	noclonal
	A16	Krejcarek et al. Covalent attachment of chelating groups to macromolecules. <i>Biochem Biophys Res Commun</i> 77:581-585 (1977)					

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	AI/I	TECH CENTER 1600/2900
		Lark et al. Aggrecan degradation in human cartilage. Evidence for both matrix metalloproteinase and aggrecanase activity in normal, osteoarthritic, and rhematoid joints. <i>J Clin Invest</i> 100:93-106 (1997)
	A18	Lindley et al. Production of monoclonal antibodies using recombinant baculovirus displaying gp64-fusion proteins. J. Immun. Methods 234:123-135 (2000)
	A19 ,	Lorenzo et al. A novel cartilage protein (CILP) present in the mid-zone of human articular cartilage increases with age. J Biol Chem 273:23463-23468 (1998)
	A20 ,	Luckow et al. Efficient generation of infectious recombinant baculoviruses by site-specific transposon-mediated insertion of foreign genes into a baculovirus genome propagated in <i>Escherichia coli. J Virol</i> 67:4566-4579 (1993)
	A21	Marcelino et al. CACP, encoding a secreted proteoglycan, is mutated in camptodactyl-arthropathy-coxa vara- pericarditis syndrome. <i>Nature Genetics</i> 23:319-322 (1999)
	A22	Merberg et al. A Comparison of Vitronectin and Megakaryocyte Stimulaing Factor. <i>Biology of Vitronectins and their Receptors</i> pp. 45-52 (1993)
	A23	Ohta et al. Expression of matrix metalloproteinase 7 (matrilysin) in human osteoarthritic cartilage. <i>Lab Invest</i> 78:79-87 (1998)
	A24	Panula et al. Articular cartilage superficial zone collagen birefringence reduced and cartilage thickness increased before surface fibrillation in experimental osteoarthritis. <i>Ann Rheum Dis</i> 57:237-245 (1998)
	A25	Schmid et al. Immunohistochemical distribution of a novel proteoglycan in the surface lamina of articular cartilage. <i>Proceedings of the Orthopedic Res. Soc.</i> p. 97-117 (1994)
	A26	Schumacher et al. Chondrocytes of the superficial zone of bovine articular cartilage synthesize and secrete a novel proteoglycan. <i>Orthopaedic Research Society</i> , poster presentation, 40 th Annual Meeting, New Orleans, LA (Feb. 21-24, 1994)
	A27	Schumacher et al. Macromolecules synthesized by articular chondrocytes of the superficial zone but not the deeper zones are also synthesized by synovium. <i>Orthopaedic Research Society</i> , poster presentation, 41 st Annual Meeting, Orlando, Florida, Feb. 13-16,1995, <i>Trans. Orthop. Res. Soc.</i> 20:397 (1995)
	A28	Schumacher et al. A novel proteoglycan synthesized by superficial-zone chondrocytes of articular cartilage. American College of Rheumatology, platform presentation, <i>Arthr. Rheum</i> . 36:S90 (1993)
	A29	Schumacher et al. A novel proteoglycan synthesized and secreted by chondrocytes of the superficial zone of articular cartilage. <i>Arch. Biochem. Biophys.</i> 311(1):144-152 (1994)
	A30 /	Schumacher et al. Immunolocalization of a novel proteoglycan synthesized by cells lining the synovia cavity. <i>Trans</i> . <i>Orthop. Res. Soc.</i> 23:442 (1998)
	A31	Schumacher et al. Immunodetection and partial cDNA sequence of the proteoglycan. Superficial Zone Protein, synthesized by cells lining synovia joints. <i>J. Orthop. Res.</i> 17:110-120 (1999)
	A32	Su et al. Use of a PPAR gamma-specific monoclonal antibody to demonstrate thiazolidinediones induce PPAR gamma receptor expression <i>in vitro</i> . <i>Hybridoma</i> 18:273-280 (1999)
	A33	Su et al. Monoclonal antibodies against human collagenase and stromelysin. <i>Hybridoma</i> 14(4):383-390 (1995)
	A34	Su et al. Monitoring of PPAR alpha protein expression in human tissue by the use of PPAR alpha-specific Mabs. Hybridoma 17:47-53 (1998)
	ر A35	Swann et al. The lubricating activity of synovial fluid glycoproteins. Arthritis and Rheum 24:22-30 (1981)
	A36	Towle et al. Detection of interleukin-1 in the cartilage of patients with osteoarthritis: a possible autocrine/paracrine role in pathogenesis. <i>Osteoarthritis Cartilage</i> 5:293-300 (1997)
	A37	Tudor et al. Superficial Zone Proteoglycan Biosynthesis is Stimulated by Growth Factors But Inhibited by IL-1 In Chondrocytes Maintained in Agarose Cultures. 45 th Annual Meeting. <i>Orthopaedic Research Society</i> . Anaheim. CA (February 1-4, 1999)
EXAMINER:		DATE CONSIDERED:
EXAMINER:		if reference considered, whether or not citation is in conformance with MPEP 609: Draw line through citation if and not considered. Include copy of this form with next communication to applicant.